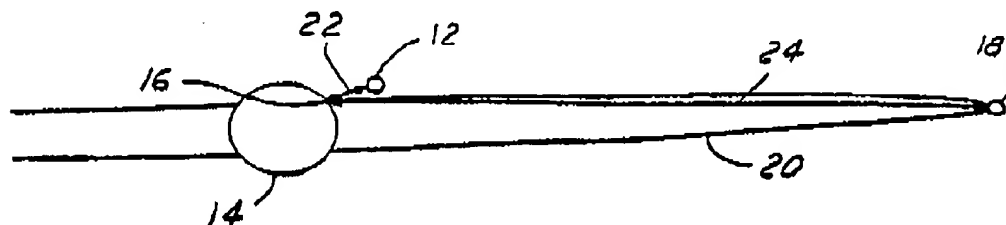


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09/594,375 **15 June 2000 (15.06.2000) US**(71) Applicant: **HUGHES ELECTRONICS CORPORATION (US/US); 200 North Sepulveda Boulevard, El Segundo, CA 90245 (US).**(72) Inventors: **CHANG, Donald, C., D.; 2350 Moberly Court, Thousand Oaks, CA 91360 (US). WANG, Weizhong; 27113 Indian Peak Road, Rancho Palos Verdes, CA 90275 (US). FERIA, Ying; 306 Anderson**Street, Manhattan Beach, CA 90266 (US). **CHANG, Ming, U.; 28815 Indian Valley Road, Rancho Palos Verdes, CA 90275 (US). ROSEN, Harold, A.; 14629 Hilltop, Santa Monica, CA 90402 (US). LIM, Wah, L.; 30 Canyon Fairway Drive, Newport Beach, CA 92660 (US).**(74) Agents: **DURAI SWAMY, Vijayalakshmi, D. et al.; Hughes Electronics Corporation, Building 001, Mail Stop A109, P.O. Box 956, El Segundo, CA 90245 (US).**(84) Designated States (regional): **European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR).****Published:****-- without international search report and to be republished upon receipt of that report****For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.**(54) Title: **COMMUNICATION SYSTEM HAVING FREQUENCY REUSE IN NON-BLOCKING MANNER**

(57) Abstract: A communications system (10) and method of operating the communications system includes a high altitude communication device (12) that communicates with a plurality of user terminals and a gateway station (30). The gateway station (30) couples the users to terrestrial networks (32) and other users. The high altitude communication device (16) has a controller that generates a second beam having the first frequency to a service (26). The stratospheric platform (12) does not generate the second beam within a blocking area. User terminals within the service area outside the blocking area are configured to receive the first beam and the second beam.

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